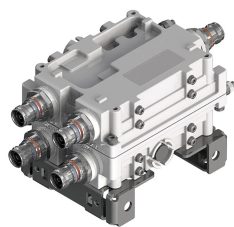


# CBC426T-DS-43 | E14F05P31



## Twin Diplexer, 380–960 MHz/1695–2690 MHz,dc Sense,4.3-10

- BTS-to-feeder and feeder-to-antenna application
- New 4.3-10 connectors for improved PIM performance and size reduction
- Automatic dc switching with dc sense
- Convertible mounting brackets

This product will be discontinued on: December 31, 2024

Replaced By:

E14F05P59      Twin 2-pak Diplexer, 380–960 MHz/1425–2690 MHz, DC SMART bypass, with 4.3-10 connectors

## Product Classification

**Product Type**      Diplexer

## General Specifications

**Product Family**      CBC426

**Color**      Gray

**Common Port Label**      ANT

**Modularity**      2-Twin

**Mounting**      Pole | Wall

**Mounting Pipe Hardware**      Band clamps (2)

**RF Connector Interface**      4.3-10 Female

**RF Connector Interface Body Style**      Long neck

## Dimensions

**Height**      152 mm | 5.984 in

**Width**      121 mm | 4.764 in

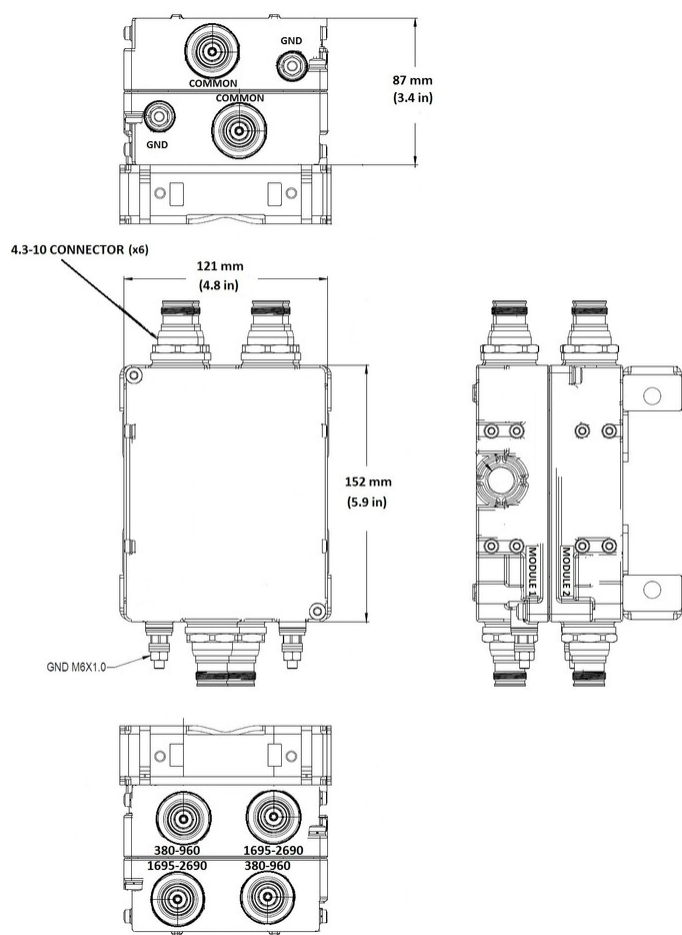
**Depth**      87 mm | 3.425 in

**Ground Screw Diameter**      6 mm | 0.236 in

**Mounting Pipe Diameter Range**      40–160 mm

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## Outline Drawing



## Electrical Specifications

Impedance	50 ohm
License Band, Band Pass	APT 700   AWS 1700   CEL 850   CEL 900   DCS 1800   EDD 800   IMT 2100   IMT 2600   LMR 750   LMR 800   LMR 900   PCS 1900   TDD 1900   TDD 2000   TDD 2300   TDD 2600   USA 600   USA 700   USA 750

## Electrical Specifications, Common Port

Composite Power, RMS	250 W
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## Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method	Auto sensing
dc/AISG Pass-through Path	See logic table

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Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform
Voltage	7–30 Vdc

## Electrical Specifications, AISG

AISG Carrier	2176 KHz ± 100 ppm
Insertion Loss, maximum	1 dB
Return Loss, minimum	15 dB

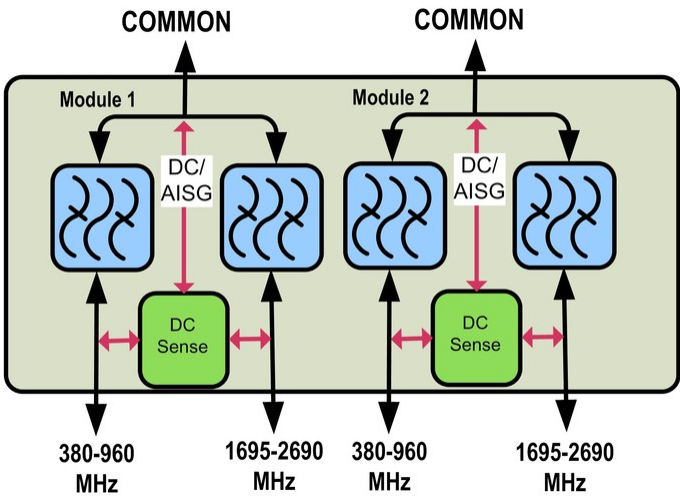
## Electrical Specifications

Sub-module	1   2	1   2
Branch	1	2
Port Designation	380-960	1695-2690
License Band	LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass USA 600, Band Pass CEL 850, Band Pass	PCS 1900, Band Pass WCS 2300, Band Pass AWS 1700, Band Pass TDD 2600, Band Pass

## Electrical Specifications, Band Pass

Frequency Range, MHz	380–960	1695–2690
Insertion Loss, typical, dB	0.1	0.1
Total Group Delay, typical, ns	2	4
Return Loss, typical, dB	24	22
Isolation, typical, dB	65	63
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000
3rd Order PIM, minimum, dBc	-161	-161
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

## Block Diagram



## Logic Table

Combining Mode Operation (Ground Based)			
RF Ports Input DC Voltage			
380 to 960 MHz	1695 to 2690 MHz	COMMON	DC/AISG Path Selection
7 ≤ V ≤ 30	<7	<7	380 to 960 MHz to COMMON "ON"
<7	7 ≤ V ≤ 30	<7	1695 to 2690 MHz to COMMON "ON"
7 ≤ V ≤ 30	7 ≤ V ≤ 30	<7	1695 to 2690 MHz to COMMON "ON"

Splitting Mode Operation (Tower Top)			
RF Ports Impedance DC (Load sensing)			
380 to 960 MHz	1695 to 2690 MHz	COMMON	DC/AISG Path Selection
open/load	short	7 ≤ V ≤ 30	COMMON to 380-960 "ON"
short	open/load	7 ≤ V ≤ 30	COMMON to 1695-2690 "ON"
open/load	open/load	7 ≤ V ≤ 30	ALL ports ON
short	short	7 ≤ V ≤ 30	ALL ports OFF

## Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity	5%–100%
Corrosion Test Method	IEC 60068-2-11, 30 days
Ingress Protection Test Method	IEC 60529:2001, IP67

## Packaging and Weights

Included	Mounting hardware
Mounting Hardware Weight	0.6 kg   1.323 lb
Volume	1.6 L
Weight, without mounting hardware	2.7 kg   5.952 lb

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

